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A Study of the Relative Costs, Teaching Loads, and Extracurricular Loads of Teachers in Six Special Departments of Public Schools in the State of Minnesota

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A STUDY OF THE RELATIVE COSTS, TEACHING LOADS, AND EXTRACURRICULAR LOADS OF TEACHERS IN SIX SPECIAL DEPARTMENTS OF PUBLIC SCHOOLS IN THE STATE OF MINNESOTA

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This thesis, presented by Merlin Elie in partial fulfillment of the requirements for the degree of Master of Science in Education, is hereby approved by the Committee on Instruction in charge of his work.

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CHAPTER I

Introduction

During the past two or three decades special departments have rapidly developed and expanded in our public school systems----training in special subjects such as; home economics, physical education, music, commercial, and industrial arts was gradually added to the curriculum during this period because of a demand on the part of the people for preparation in practical arts. Educators also realized the importance of such training and were anxious to promote special activities. In addition to having vocational values, skills developed are extremely valuable for avocational pursuits.

Although the value of special activities is admitted by educators and parents, there seems to be a tendency to emphasize the old traditional subjects both in respect to time and finance. Perhaps it is only natural that new subjects and departments receive less attention than the old until they have completely proven themselves. Such special departments have grown up competing for space in the curriculum and school building, and for financial support.

Statement of the Problem

Because of the place special departments occupy in the school curriculum and because of different emphasis placed upon the various departments, it seems important to determine the relative place they occupy and the relative proportion of money spent for each subject, also to make comparisons in extracurricular activities conducted by special teachers and to show types of special activities conducted by schools of various sizes.

Purposes

This study is undertaken to determine:

1. The amount of money spent in special departments in the schools of Minnesota for equipment and supplies, exclusive of salaries.
2. The relative salaries of teachers in these special departments.
3. Teacher load in these special departments.
4. The cost per student hour in these departments.
5. Teacher load in extracurricular activities.

Method Employed in the Study

Questionnaires covering the necessary information

were mailed to various superintendents of city school districts. Of the 375 polled, replies were received from 156 schools or an approximate 41 percent of the total. These returns were used as a reliable return. However, another fifteen returns were not included, due to lack of sufficient information.

The mailing list was obtained from the Minnesota High School League Bulletin, Volume 25, No. 3, November 1950. Three hundred and seventy-five schools were selected from this list and three others were added because of immediate professional acquaintances. One questionnaire was sent to each school and addressed to the superintendent of schools.

It was assumed in this study that the superintendent was the individual best qualified to complete the report. The position of superintendent should qualify him as the authority necessary to make the most correct responses.

Table I, on the following page, shows the size of the school according to total high school enrollments (grades 7-12), and also the percentage of the total represented by each group.

TABLE I

NUMBER OF SCHOOLS IN SURVEY

School Enrollment	Number of Schools	Percent
0-99	29	18.7
100-199	53	33.9
200-299	32	20.5
300 and Over	42	26.9
Total	156	100.0

Limitations of the Study

It is generally accepted by most authorities that the questionnaire method is among the least desirable for information concerning any specific topic. Nevertheless, in order to secure information on this topic, this method was the only one feasable. The nature of the questionnaire was such that reference to school records was essential and required a considerable amount of time on the part of the superintendent. In view of the time and work involved in completing the questionnaire, the return of 41 percent is gratifying.

It seems the respondents were in many instances

giving the investigator the type of information which they thought was desired. Incidental memory was no doubt used in parts of the questionnaire returns.

It undoubtedly is true that unintentional misinterpretations have been given to the problems presented in the questionnaire. This is unavoidable regardless of the care used in constructing the questionnaire.

Although there are a number of delimitations and inaccuracies, it is felt that the information derived from the returns is valid enough to warrant computing and investigation.

Review of Literature

There are many statistics, surveys, and articles about teaching load. Most recent among these is a study by Oswald Tufte[1] who conducted "A Survey of the Time Load of Teachers in Accredited Schools of Eastern North Dakota" during the year of 1950. His survey indicated that time had little influence on salary and that women as a group are not being paid on the same scale as men. He concluded that the elementary teacher is not being paid what she is

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1 Oswald Tufte, "A Survey of the Time Load of Teachers in Accredited Schools of Eastern North Dakota", Unpublished Master's Thesis, University of North Dakota, August 1950, p. 46.

worth.

Starr M. King, writing in the "Massachusetts Teacher" states: "How different the atmosphere surrounding the football coach as compared with other teachers in the school. He enjoys unlimited freedom from any supervision of instruction. No other teacher would be permitted such immunity."[2]

A very recent version of teaching load is presented in an article by I.L. Kandel where he declares, "How erroneous the popular version of the teacher's career is more than adequately proved in a study released at the end of March by the National Education Association. According to this report, entitled "Teaching Load in 1950", the average classroom teacher in the nation's schools works 48 hours a week. In addition to the actual hours of classroom teaching time must be found for correcting papers, preparation of lessons, supervising study halls, monitoring, making out records, and sponsoring school activities.

Further, the social situation presents new and more difficult problems with which the teacher has to cope. Overcrowded buildings and lack of equipment do

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2 Starr M. King, "Is the Coach a Good Teacher?", Clearing-House, Vol. 24:420, March 1950.

not simplify the conditions for instruction and education."[3]

We have further evidence by T.E. Dawes in the "American School Board Journal" where he declares, "The 'teaching load' refers to the amount of work which a teacher does each day or week. The concept has grown to include all the work done by a teacher in connection with her position: (a) the actual hours of teaching, (b) the hours given to preparation of schoolwork, clerical tasks, and other necessary duties."[4]

A summary of 500 questionnaires sent out by "The Nations Schools" showed that, "Many administrators deplore the trend toward 'piece work' in the teaching profession. 'Hire teachers, if possible', advises one schoolman, 'who have cultivated or will cultivate the professional attitude.' Teachers are rapidly lowering themselves to the portal-to-portal basis."[5]

W.R. Knox declares, "No distinction should be made between curricular and extracurricular activities, but rather to consider all phases of school work as

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3 I.L. Kandel, "Teacher's Lot", School and Society, Vol. 73:378-79, June 16,1951.

4 T.E. Dawes, "Teaching Load and School Costs", American School Board Journal, Vol. 117:33-34, July 1948.

5 Nations Schools, Vol. 39:30, June 1947.

equally important and the two phases making up the job to be done. We do, however, attempt to divide the extra-curricular activities equally, and in case a major activity takes a greater percentage of the teacher's day, we decrease her teaching load proportionately."[6]

In a further review of literature as it pertains to extracurricular load, I.W. Clubine states, "The extra-curricular load increased as the size of the school increased and that the instructional load tended to decrease as the size of the school increased."[7]

In a study of 2128 teachers, their respective teaching load and their pay schedule, J.H. Shaw and G.H. Krablin who made a survey of over 400 schools in New York, using the questionnaire method contended, "Practically all schools have some type of extra pay for extra service policy but both policy and/or practice is confused or chaotic in many instances and even contradictory in a few.

The program of extra pay for extra service has been carried so far in individual school systems that in some instances all duties outside of actual class meetings

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6 W.R. Knox, "Extra Pay for Extra Work", School Executive, Vol. 69:41-42, December 1949.

7 I.W. Clubine, "Teacher Load in the Secondary Schools of Ontario", Doctor's Thesis, New York University, 1944.

seem to have been contracted for on an individual piece-meal basis! This may be accounted for partially by an administrative attempt to provide salary increases where boards were unwilling to increase basic salary schedules, although no direct evidence of this was uncovered by the study."[8]

At a workshop early in January 1951, representatives of the American Association for Health, Physical Education, and Recreation discussed the question, "What About Extra Compensation for Additional School Service?" They approved in principle five general policies. These policies are:

"1. That we should include all educational activities conducted under the jurisdiction of boards of education, insofar as possible, within the regular school program; thereby reducing to a minimum or eliminating altogether the title of 'special teacher' as well as 'special services' and 'extra curricular activities'.

2. That we should endeavor to pay salaries to our teachers high enough to provide a comfortable living; without the necessity of their seeking extra services, within or out of school for extra

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8 J.H. Shaw and G.H. Krablin, "Extra Pay for Extra Services", Research Quarterly, Vol. 21:195-202, October 1950.

pay.

3. That we should make every effort to equalize teaching load and benefits available to all teachers, insofar as possible, and not grant extra pay for certain activities.

4. That in the event of unavoidable inequalities as implied in item 3 above, and extra pay is granted, such extra pay should apply to all teachers, and then only after the assignment of a reasonably full teaching load.

5. That we recognize the uniqueness of administrative problems confronting each school, district or community, and that such problems may require the interpretation or adaptation of the general policies contained herein to meet the special exigencies of the local situation."[9]

Finally, an outstanding reference concerning the Minneapolis schools is exemplified by an article from the "American School Board Journal" where "The New Pay Schedule for Extracurricular Activities" is accurately portrayed by the following statements:

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9 C.L. Brownell, "What About Extra Compensation for Additional School Services?", The Journal of American Association of Health, Physical Education, and Recreation, Vol. 22:22-23, January 1951.

"The board of education of Minneapolis, Minnesota, has adopted a new pay schedule for teachers engaged in extracurricular activities. All payments will be made in accordance with the schedule but within the limit of a budget established for each school. Compensation for any activity will be wholly in terms of money or wholly in terms of time. Each person receiving compensation for extra duties must carry standard load of five classes and an advisory or the equivalent. All payments must be made through the board of education.

The principal of each school, on October 1 and February 15 of each year, will file a complete report of all class and extraclass assignments given each teacher in the building. The report of payments made to staff members will be compiled in June each year and be made available for the examination of faculty members.

Schedule of Compensation

(a) Directors of intramural activities, $50 to $250 per semester, varying according to the extent of the program and the individual in charge; (b) annual or yearbook, $200; (c) class play directors, $125; (d) festivals, $100; (e) lock and locker management, $100 per year; (f) debate, $100 per year; (g) major music and dramatic performance after school hours, one teacher, $18; two teachers

$12 each; (h) newspaper and magazines, $18 each issue; maximum $360 per school year; (i) stage director, $10 each rehearsal; (j) football, coach, $400; first assistant, $250; B squad coach, $150; assistants, $125; (k) basketball coach, $400, B squad coach, $150; (l) baseball coach, $250, assistant, $125; (m) track coach, $250, assistant, $125; (n) hockey coach, $200, assistant, $125; swimming, tennis, golf, wrestling, skiing, cross country, $125; faculty manager, $200 per semester; equipment manager, $50 to $100 per semester; service assignments, $4 afternoons and $7 evenings."[10]

It is clear, that teacher load cannot be divorced from time consumption. Assuming honesty and sincerity of intention, a teacher performs to capacity regardless of the number of students in his classes. Individual instruction and guidance, with all that they imply in modern educational efforts, would appear to be a factor at any time. Formal school hours are limited by the clock, but preparation for instruction remains about the same whatever the size of the classes.

Therefore, this survey, though dealing with an aspect of educational progressiveness which may become increasingly important, should be regarded as a first step

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10 American School Board Journal, Vol. 117:32, December 1948.

in the solving of a very important problem. A survey, such as this, conducted over a field as wide as the nation itself is the ultimate goal. However, this study is not final and timeless in itself; its significance, like others of its kind, is scarcely more than momentary when pictured against the backdrop of possible situations; its largest possible contribution would seem to be intensification of more investigation along parallel lines on a progressively wider front. Research touching an unchangeable law of nature is one thing, but when it fringes upon a changing phenomenon is quite another.

CHAPTER II

Relative Study of Total Salary and Total Costs in the Special Departments

Very little information concerning the costs of the special departments of art, music, commercial, home economics, physical education, and industrial arts was found in reviewing literature of a fairly recent date. The recent rise in teacher's salaries has automatically increased departmental costs. This constitutes, however, but one factor in the rising costs necessary for supply and maintenance of these special departments. Increased enrollments in the special fields have enlarged the costs. These increased enrollments are evidenced by conclusions from the "Biennial Survey of Education in the United States, 1948-1950" which states, "Among the broad subject fields, home economics and industrial arts had the largest percentage increase in enrollment from 1934 to 1949."[11] "Among individual subjects physical education, typewriting . . . . . are outstanding because of percentage increases in enrollments since 1934."[12] "Enrollment in art courses

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11 The Office of Education, Federal Security Agency, "Offerings and Enrollment in High School Subjects", Biennial Survey of Education in the United States, 1948-50, Washington, 1951, Chapter 5, p. 28.

12 Ibid., p. 28.

amounts to 48 percent of all junior high school pupils."[13] "Music appeared for the first time in the historical tables in 1915 . . . . . In subsequent investigations the percentages dropped to about 25 until 1949, when enrollments in this field amounted to 30.1 percent of the pupils."[14] "If all enrollments in health and physical education are added together they amount to more than 100 percent of the pupils."[15]

Another factor involved in rising costs is the increased use of better and more expensive equipment necessitated by higher accrediting standards.

These three factors: (1) higher salaries due to rising costs of living, (2) increased enrollments demanding more teaching personnel, and (3) superior equipment required due to advanced accrediting standards, contribute to the complexity of the financial problem.

In an attempt to analyze the total cost per special department, four tables were constructed based on information obtained in the questionnaire. Henceforth, these tables

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13 The Office of Education, Federal Security Agency, "Offerings and Enrollments in High School Subjects", Biennial Survey of Education in the United States, 1948-50, Washington, 1951, Chapter 5, p. 25.

14 Ibid., p. 25.

15 Ibid., p. 24.

will be referred to as Tables II, III, IV, and V. They include the following information for each of the six special departments of industrial arts, art, commercial, home economics, music, and physical education: (1) total money spent in each department, exclusive of salaries, (2) number of schools reporting, (3) the average money spent in each department. Table II includes schools of an enrollment from 0-99; Table III, 100-199; Table IV, 200-299; and Table V, over 300.

The tables are presented below and on the following pages.

TABLE II

TOTAL MONEY SPENT IN SPECIAL DEPARTMENTS
EXCLUSIVE OF SALARIES
Enrollment 0-99

Department	Total Money Spent by All Schools	Number of Schools Reporting	Average Money Spent Per School
Industrial Arts	$ 2,100	2	$1050.00
Art			
Commercial	10,855	23	471.50
Home Economics	3,800	8	475.00
Music	6,808	16	425.50
Physical Education	10,410	29	358.96

TABLE III

TOTAL MONEY SPENT IN SPECIAL DEPARTMENTS
EXCLUSIVE OF SALARIES
Enrollment 100-199

Department	Total Money Spent by All Schools	Number of Schools Reporting	Average Money Spent Per School
Industrial Arts	$16,338.50	24	$680.77
Art	350.00	4	85.00
Commercial	15,758.52	48	328.30
Home Economics	15,028.90	38	399.84
Music	18,405.92	39	471.94
Physical Education	20,261.76	50	405.24

TABLE IV

TOTAL MONEY SPENT IN SPECIAL DEPARTMENTS
EXCLUSIVE OF SALARIES
Enrollment 200-299

Department	Total Money Spent by All Schools	Number of Schools Reporting	Average Money Spent Per School
Industrial Arts	$25,596.51	28	$914.16
Art	1,447.50	4	361.80
Commercial	10,284.50	33	311.65
Home Economics	17,673.22	30	572.44
Music	19,722.40	29	680.08
Physical Education	15,690.41	33	475.46

TABLE V

TOTAL MONEY SPENT IN SPECIAL DEPARTMENTS
EXCLUSIVE OF SALARIES
Enrollment 300 and Over

Department	Total Money Spent by All Schools	Number of Schools Reporting	Average Money Spent Per School
Industrial Arts	$59,782.58	40	$1494.58
Art	11,810.10	21	562.38
Commercial	22,633.95	40	565.85
Home Economics	31,835.56	40	768.39
Music	43,614.30	39	1118.32
Physical Education	38,573.00	40	964.30

The column entitled "Total Money Spent by all Schools" pertains to equipment and operating costs, exclusive of teacher's salaries, which will be treated separately.

All the special department, with one exception, were represented by the reporting schools. This lone exception proved to be "art" which was not taught by any schools having an enrollment below one hundred.

Several interesting facts were brought to light by an analysis of the figures presented in the Tables II, III, IV, and V. Perhaps, the most significant shows that small

schools, which operate on much smaller budgets, have to spend relatively greater proportions of that budget to maintain the special departments. For example, commercial departments, in schools having an enrollment below one hundred, spend an average of $471.50 to maintain that part of their curriculum while schools having an enrollment of over three hundred spend approximately $94 more to maintain a like department. This represents a sum of only 20 percent larger than that of the smaller school while the number of student hours is 633 percent greater in the large schools.

To illustrate this condition, Table VI was constructed to show the difference in average total cost, exclusive of salaries, and the difference in total student hours for each department. For purposes of extreme contrast, the very smallest schools (0-99) and the largest schools (over 300) were used for comparison. The differences were expressed in the percentage of increase calculated by dividing the figures representing the smallest school into those of the largest schools. This was done so that differences could be presented with ease and clarity. Table VI is found on page 20.

TABLE VI

A PERCENTAGE COMPARISON BETWEEN
TOTAL AVERAGE MONIES SPENT PER SCHOOL,
EXCLUSIVE OF SALARIES, AND STUDENT HOURS

	Total Average Money Spent Per School Exclusive of Salaries			Total Student Hours		
Department	0-99	Over 300	Percent Increase	0-99	Over 300	Percent Increase
Industrial Arts	$1050.00	$1494.58	1.42	7,488	1,595,934	213.10
Art		562.38			535,950	
Commercial	471.50	565.85	1.20	237,420	1,503,180	6.33
Home Economics	475.00	768.39	1.20	36,270	1,056,114	29.11
Music	425.50	1118.32	2.39	112,320	1,374,660	12.23
Physical Education	358.96	964.30	2.13	219,978	2,147,076	9.76

As previously stated, the smallest schools spend almost as much on their commercial departments as do the largest schools. The smallest schools are setting aside a disproportionate share of their budget to maintain a commercial department commensurate with minimum state standards. These figures certainly present a staunch argument for consolidation of smaller districts.

On further examination of Table VI, it is observed

that the departments of home economics and industrial arts present cases more startling than that of the commercial curricula. With only an increase of 42 percent in total average money spent for industrial arts, exclusive of salaries, the largest schools have 213.10 times as many student hours. This would seem to indicate that the smallest schools are carrying an overwhelming burden to support industrial arts. Since only two of the smallest schools reported industrial arts departments, this condition cannot be considered to apply to the majority of the small schools.

In regard to home economics, it is noted that the largest schools spend only 20 percent more for their departments on an average, while giving instruction in 29.11 times as many student hours. This situation also is more generally true since more of the smaller schools maintain a home economics program.

The large schools report 9.76 times as many student hours in physical education as the smallest schools, and spend 2.13 times as much money to supply and equip these departments. This is the lowest ratio between total cost and total student hours established by any of the special departments. It may be due to the larger number of pupils involved since even the small schools require physical education of all students in order to comply with minimum state

standards.

Since no respondents reported art in schools having an enrollment below 100, a comparison could not be made for this department. Art varies considerably from the pattern set by the other five departments. First, it is not offered in schools with an enrollment below 100. Secondly, the variation in average monies spent, of $85.00 in schools of enrollments below 200 to that of $562.38 spent by institutions having more than 300 students, represents an increase in expenditures of approximately 650 percent, while student hours increased 44.20 times. Third, the total money expended for art in all schools is a great deal less than for any other department. In fact, art receives 50 percent less than the lowest total for any other department.

Of course, art represents the most recent of the special departments and it may be that when it reaches its maturity, it, too, will have a respectable total comparable with that of the other departments. Again, art requires relatively small outlays for equipment as compared with the other five departments. Whatever the reason for the low total cost, the fact remains that art represents the "poor relation" of the six special departments included in the survey.

It must be remembered in analyzing the figures in Table VI, that the total money spent refers only to supplies and equipment necessary to operate the special departments and that it does not include salaries of all personnel involved. This part of the study will be treated later in this chapter.

It was felt advisable to compare those schools having an enrollment of 0-99 with those of 100-199 enrollment in the same manner as was done in Table VI. In order that this might be done, another table was constructed. Table VII follows on page 24.

TABLE VII

A PERCENTAGE COMPARISON BETWEEN
TOTAL AVERAGE MONIES SPENT PER SCHOOL,
EXCLUSIVE OF SALARIES, AND STUDENT HOURS

Department	Total Average Money Spent Per School Exclusive of Salaries			Total Student Hours		
	0-99	100-199	Percent Increase	0-99	100-199	Percent Increase
Industrial Arts	$1050.00	$680.77	-0.44	7,488	261,576	34.98
Art		85.00			12,132	
Commercial	471.50	328.30	-0.70	237,420	572,580	2.41
Home Economics	475.00	399.84	-0.84	36,270	391,860	10.80
Music	425.50	471.94	1.11	112,320	395,784	3.52
Physical Education	358.96	405.24	1.13	219,978	648,756	2.90

In examining the above table, it is noted that the difference between the percent of increase of total money spent and the total student hours is very great. In music and physical education, the ratio between the average costs is less, perhaps, because of the large number of students involved in both large and small schools. In commercial departments, the difference between the percent of increase in total money spent and total student hours is low. This

may be attributed to more intensive use of the commercial equipment than that of the other departments.

However, the pattern is not as exaggerated between schools of 0-99 and 100-199 enrollment as that between 0-99 and over 300 enrollment.

The low number of student hours of instruction in the field of industrial arts in the smaller school probably accounts for the decrease in cost for larger schools.

The ratio between percentage increases for music and physical education bears a striking similarity. In each case the larger schools have approximately three times as many student hours as the smaller schools, and in each case the percentage of increase in total money spent to maintain the departments is about the same, 1.11 percent for music and 1.13 percent for physical education.

In a discussion of the problem of departmental costs, the survey would be incomplete if reference were not made to salaries of instructional personnel. Salaries plus operational and maintenance costs present a more complete financial picture. To formulate this aspect of the total problem, another series of four tables is presented. These four tables, VIII, IX, X, and XI, present information concerning (1) the total money spent including salaries, (2) the number of schools reporting, and

(3) the average money spent per school in each of the six departments previously mentioned. The four tables are classified as to total enrollment of the schools concerned in the study. Table VIII concerns those schools having an enrollment below 100; Table IX, those from 100-199; Table X, those from 200-299; and Table XI, those over three hundred.

These tables are presented below and on the following pages:

TABLE VIII

TOTAL MONEY SPENT IN SPECIAL DEPARTMENTS INCLUDING SALARIES
Enrollment 0-99

Department	Total Money Spent by All Schools	Number of Schools Reporting	Average Money Spent per School
Industrial Arts	$ 5,450	2	$2,725
Art			
Commercial	72,135	24	3,006
Home Economics	13,720	6	2,820
Music	24,698	14	1,764*
Physical Education	50,201	28	1,793

* Two schools listed music as extracurricular and gave no salary, only figures for equipment and supplies and are not included here.

TABLE IX

TOTAL MONEY SPENT IN SPECIAL DEPARTMENTS INCLUDING SALARIES
Enrollment 100-199

Department	Total Money Spent by All Schools	Number of Schools Reporting	Average Money Spent Per School
Industrial Arts	$ 97,341.20	26	$3,743.89
Art	4,836.00	4	1,209.00
Commercial	159,427.62	49	3,253.61
Home Economics	111,746.92	39	2,865.31
Music	102,069.62	38	2,686.04
Physical Education	123,899.90	52	2,382.69

TABLE X

TOTAL MONEY SPENT IN SPECIAL DEPARTMENTS INCLUDING SALARIES
Enrollment 200-299

Department	Total Money Spent by All Schools	Number of Schools Reporting	Average Money Spent Per School
Industrial Arts	$108,648.83	28	$3,880.31
Art	5,247.50	4	1,311.88
Commercial	103,969.20	32	3,249.04
Home Economics	108,254.46	31	3,492.07
Music	112,235.00	28	4,008.40
Physical Education	99,269.18	32	3,102.16

TABLE XI

TOTAL MONEY SPENT IN SPECIAL DEPARTMENTS INCLUDING SALARIES
Enrollment 300 and Over

Department	Total Money Spent by All Schools	Number of Schools Reporting	Average Money Spent Per School
Industrial Arts	$416,527.59	42	$ 9,917.33
Art	75,920.60	22	3,450.94
Commercial	240,609.55	42	5,728.80
Home Economics	238,879.70	42	5,687.62
Music	311,854.32	42	7,425.11
Physical Education	444,789.88	42	10,590.23

It was necessary to prorate the teacher's salaries in accordance with the fraction of time they taught in their special department and the fraction that they taught outside of the special field. For example, a teacher earning $3000 teaching two-thirds of his time in a special department would be paid a salary of $2000 for work in that department. This figure would be used in computing the total money spent, including salaries, by all schools. These figures appear in Tables VIII, IX, X, and XI. This was necessary in order that a valid picture of total costs per department might be presented, since this study is only concerned with the costs in the

special departments.

Two schools failed to record salaries paid to the music teachers, listing only the figures for equipment and supplies (Table VIII), making it necessary to exclude these schools in computing music costs.

It is safe to assume that the annual budget of a school having an enrollment of 200-299 will be considerably larger than that of a school in the 0-99 bracket. However, the difference in average money spent per school per department will not be in proportion to differences in budgets. For example, the commercial department of schools of an enrollment of 0-99 spend an average of $3006.00 while schools having 200-299 students spend $3249.04, or only $234.04 more. It is felt that the smaller school bears a severe burden in order to maintain commercial subjects in its curriculum. It would seem advisable that smaller schools receive a greater share of state aids to maintain their program if we are to abide by the axiom "equal education for all children".

This same situation is true of all departments, but not to such a marked degree as illustrated by the commercial department.

The average money spent for each department shows quite a wide variation even in schools of the same size.

The widest range occurs in the largest schools (Table XI, page 28) where there is a spread of approximately $7000.00 between the money spent in the art departments and that of physical education. Few schools reported art departments, but enough are represented to show the general trend.

In the largest schools, physical education and industrial arts cost considerably more total money than the other departments. Industrial arts necessitates much expensive equipment which would explain its heavy expenditures, while in the larger schools, the extensiveness of the physical education program determines its high position as to costs.

Art departments spend a relatively small amount of the total. There are undoubtedly several reasons for this, but it is logical to assume that the low cost of materials and supplies tend to keep the costs down.

In schools of all sizes, the total cost of physical education ranked consistently high, but the cost per pupil hour in all cases ranked lowest, except for schools below 100 in enrollment.

In order that total costs, including salaries, might be examined in reference to total student hours, a table was set up. This table includes the total costs, including salaries, and total student hours for the special

departments of smallest schools, and also for the largest schools. Percentage increases were computed for both factors for the six special departments (Table XII).

TABLE XII

A PERCENTAGE COMPARISON BETWEEN TOTAL AVERAGE MONIES SPENT PER SCHOOL, INCLUDING SALARIES, AND STUDENT HOURS.

	Total Average Cost			Total Student Hours		
Department	0-99	Over 300	Percent Increase	0-99	Over 300	Percent Increase
Industrial Arts	$2,725.00	$ 9,917.33	3.64	7,488	1,595,934	213.10
Art	.	3,450.94	.	.	535,950	.
Commercial	3,006.00	5,728.80	1.90	237,420	1,503,180	6.33
Home Economics	2,820.00	5,687.62	2.02	36,270	1,056,114	29.11
Music	1,764.00	7,425.11	4.21	112,320	1,374,660	12.23
Physical Education	1,793.00	10,590.23	5.91	219,978	2,147,076	9.76

An analysis of the figures in the above Table XII shows that the relationship between the departments of physical education, music and commercial is much alike when comparing percentage increases for both total average cost and for student hours. In each case these two factors

tend to establish a rough 1:3 ratio. The largest number of student hours are taught in the physical education department. The large schools teaching 9.76 times as many student hours in physical education as the small schools, increased their total average costs by only 5.91 percent.

Industrial arts definitely exemplifies the advantage a large school displays over a small school in comparing total average costs and student hours. While the larger schools teach 213.10 times as many student hours, their total average cost increased only 3.64 times that of the small school. This seems to indicate that consolidation would be a trend in the right direction.

Generally speaking, the large schools justify their being on the facts presented above.

Since 56 percent of the schools responding to the questionnaire had enrollments below 200, it was deemed advisable to construct another table similar to Table XII, except that schools having an enrollment range of 100-199 were substituted for those above 300. This table (XIII) follows on page 33.

TABLE XIII

A PERCENTAGE COMPARISON BETWEEN TOTAL AVERAGE MONIES SPENT PER SCHOOL, INCLUDING SALARIES, AND STUDENT HOURS.

	Total Average Cost			Total Student Hours		
Department	0-99	100-199	Percent Increase	0-99	100-199	Percent Increase
Industrial Arts	$2,725.00	$3,743.89	1.34	7,488	261,576	34.98
Art		1,209.00			12,132	
Commercial	3,006.00	3,253.61	1.08	237,420	572,580	2.41
Home Economics	2,820.00	2,865.31	1.02	36,270	391,860	10.80
Music	1,764.00	2,686.04	1.52	112,320	395,784	3.52
Physical Education	1,793.00	2,382.69	1.33	219,978	648,756	2.90

The same general pattern appears in the above table as in Table XII, except the percentage increases are generally smaller. However, slight as are the differences in enrollment ranges, the larger school presents definite financial advantages.

While there is very little difference in the total average costs in the departments of commercial and home economics, the larger schools teach 2.41 and 10.80 times as many student hours respectively. Again, the department of

physical education instructs the most student hours. Music, commercial, and physical education departments show similarities in a ratio comparison of their respective percentage increases.

The total expenditure by the six special departments in all the schools represents a large sum of money---approximately three million dollars. An expenditure of such a vast sum of money for six special departments certainly warrants a survey of the costs involved. Thus far this chapter has been concerned with total monies including salaries spent in each department and the total money spent for supplies and equipment. The latter figures were listed in Tables II, III, IV, and V. The figures relating to the total money spent including supplies, equipment, and salaries, have been tabulated in Tables VIII, IX, X, and XI. These figures have also been broken down to departmental averages. To complete this survey of departmental costs, a study was made of departmental salaries. In order to determine the total salaries in each department, it was necessary to subtract the total money spent for supplies and equipment (Tables II, III, IV, and V) from the total money spent for supplies, equipment, and salaries, (Tables VIII, IX, X, and XI). This process furnished figures for a new series of tables which appear on the following pages.

Four tables (XIV, XV, XVI, and XVII) are prepared for the four enrollment ranges; 0-99, 100-199, 200-299, and over 300, and include (1) total salaries paid, (2) number of teachers, and (3) average salary per department for each of the six special departments. These tables appear below and on the following pages:

TABLE XIV

SALARIES IN SPECIAL DEPARTMENTS
Enrollment 0-99

Department	Total Salaries Paid	Number of Teachers	Average Salary
Industrial Arts	$ 3,350.00	2	$1675.00
Art			
Commercial	61,280.00	23	2664.35
Home Economics	9,920.00	5.5	1803.64
Music	17,890.00	10.5	1703.81*
Physical Education	39,791.00	34.5	1153.33

* Two schools listed music as extracurricular and gave no salary, only figures for equipment and supplies, and are not included here.

TABLE XV

SALARIES IN SPECIAL DEPARTMENTS
Enrollment 100-199

Department	Total Salaries Paid	Number of Teachers	Average Salary
Industrial Arts	$ 81,002.70	26	$3115.49
Art	4,486.00	4	1121.50
Commercial	143,669.10	48	2993.11
Home Economics	96,718.02	38	2545.21
Music	83,663.72	39	2145.22
Physical Education	103,638.14	86	1205.09

TABLE XVI

SALARIES IN SPECIAL DEPARTMENTS
Enrollment 200-299

Department	Total Salaries Paid	Number of Teachers	Average Salary
Industrial Arts	$83,152.32	29	$2867.32
Art	3,800.00	2.6	1461.54
Commercial	93,684.70	34	2520.14
Home Economics	90,581.24	31	2921.98
Music	92,512.60	34.5	2681.52
Physical Education	83,579.79	62	1348.06

TABLE XVII

SALARIES IN SPECIAL DEPARTMENTS
Enrollment 300 and Over

Department	Total Salaries Paid	Number of Teachers	Average Salary
Industrial Arts	$356,745.01	81	$4404.26
Art	64,110.50	23.4	2739.76
Commercial	217,965.60	75	2906.20
Home Economics	207,044.14	65	3185.30
Music	268,240.02	81.4	3397.06
Physical Education	406,216.88	107.5	3778.75

No school with an enrollment of below 100 reported art in the junior or senior high school curriculum. Tabulations are complete, in every instance, for the remaining three Tables XV, XVI, and XVII.

In every department, average salaries in the schools having the least enrollment (0-99) are the lowest, although the average salaries paid industrial arts and commercial teachers in the schools having an enrollment of 100-199 exceed those of commercial teachers in schools whose enrollments range from 200-299. But for these two cases, salaries show a gradual rise in direct ratio to the increase in en-

rollment. Since many inexperienced teachers, who normally command low salaries begin their careers in the smaller schools, this trend seems reasonable. Also tenure regulations, salary schedules, and better equipment tend to lure the superior teacher to the larger system.

In all schools under 300 enrollment, total salaries paid to commercial teachers were larger than any of the other five departments, while in schools above 300, the total salaries paid physical education teachers were the highest. An explanation in the case of commercial teachers may exist in the fact that they taught very little outside of their field as evidenced by the fact that they taught the most student hours (237,420). This would entail a larger fraction of the proration necessary to secure valid figures for salaries limited to the special departments in question. As to physical education, the large number of pupils involved, since the course is required by statute, would tend to account for the relatively large expenditure. In all four school classifications, the number of physical education teachers exceeded any other department. In the smaller schools, physical education teachers tend to teach a great deal in other fields, which effects the amount of their salaries allotted to physical education. This tends to make all average salaries for schools below 300 the low-

est except for art. Only in schools having an enrollment of 200-299 were the total salaries for all departments, exclusive of art, fairly equal.

Again, art proved to be the "poor relation". It was the lowest in total salaries paid, number of teachers, and average salary. Only in one instance was there an average lower, that of physical education in schools having an enrollment of 200-299.

It will be noted that the highest average salaries occur in schools above 300 enrollment. This probably occurs because of the small amount of time teachers in any department teach outside their special field. This would make the departmental fraction of the total salary paid very large, which would automatically be reflected in the average salaries paid.

Industrial arts teachers commanded the highest salaries in schools having an enrollment above 300. This proved to be the highest average paid in any department for schools of all enrollment ranges.

Finally, a study of the financial aspects of the six special departments would not be complete if it did not include a breakdown of total costs to a cost per student hour. This should be of particular value and interest to administrators. The student hours were found

by multiplying the enrollment and the number of days classes met each week for each school. This gave the total number of student hours per week. Totals of all schools were added and this figure was in turn multiplied by 36 weeks to give the total student hours per year for each department. The total cost for all schools was then divided by the number of student hours to get the cost per student hour. Compilations were made for each department based on (1) total student hours for 36 weeks, (2) total cost for each department, including salaries, and (3) cost per pupil hour. Henceforth, these four tables will be referred to as Tables XVIII, 0-99; XIX, 100-199; XX, 200-299; and XXI, over 300.

TABLE XVIII

COST PER STUDENT HOUR
Enrollment 0-99

Department	Total Student Hours for 36 Weeks	Total Cost for Each Department Including Salaries	Cost per Pupil Hour
Industrial Arts	7,488	$ 5,450.00	$.727
Art			
Commercial	237,420	72,135.00	.303
Home Economics	36,270	13,720.00	.378
Music	112,320	24,698.00	.210
Physical Education	219,978	50,201.00	.228

TABLE XIX

COST PER STUDENT HOUR
Enrollment 100-199

Department	Total Student Hours for 36 Weeks	Total Cost for Each Department Including Salaries	Cost Per Pupil Hour
Industrial Arts	261,576	$ 97,341.20	$.372
Art	12,132	4,836.00	.399
Commercial	572,580	159,427.62	.278
Home Economics	391,860	111,746.92	.285
Music	395,784	102,069.62	.258
Physical Education	648,756	123,899.90	.191

TABLE XX

COST PER STUDENT HOUR
Enrollment 200-299

Department	Total Student Hours for 36 Weeks	Total Cost for Each Department Including Salaries	Cost Per Pupil Hour
Industrial Arts	422,644	$108,648.83	$.257
Art	32,400	5,247.50	.162
Commercial	540,810	103,969.20	.192
Home Economics	428,400	108,254.46	.252
Music	549,162	112,235.00	.206
Physical Education	723,906	99,269.18	.137

TABLE XXI

COST PER STUDENT HOUR
Enrollment 300 and Over

Department	Total Student Hours for 36 Weeks	Total Cost for Each Department Including Salaries	Cost Per Pupil Hour
Industrial Arts	1,595,934	$416,527.59	$.261
Art	535,950	75,920.60	.142
Commercial	1,503,180	240,609.55	.160
Home Economics	1,056,114	238,879.70	.226
Music	1,374,660	311,854.32	.227
Physical Education	2,147,076	444,789.88	.207

In determining cost per pupil hour, there necessarily will be many qualifying conditions which tend to prevent an entirely true picture of the relative costs. To discuss them completely is far beyond the scope of this survey.

A very interesting fact illustrated by the last four tables is the greater economy of cost per pupil hour achieved by the larger schools. In the department of industrial arts, perusing the cost per pupil hour in schools below one hundred as compared to those in schools above 300 enrollment, a startling situation presents itself. In

the small school, the costs are 2.8 times as great as they are in the largest school. However, the assembly line techniques of industry indicate a comparable picture. More units---less cost per unit. Both small and large schools have the same minimum standards to uphold, requiring certain fundamental operating and maintenance costs. But the larger school, with more pupil units, reduces its per pupil hour cost in almost direct ratio to each new student it registers. Previous studies have indicated this fact. Nevertheless, the vast difference in "cost per pupil hour", as evidenced in the latter four tables, is startling enough to merit reference.

But for a few exceptions, all six special departments present this same large difference between small and large schools where "cost per pupil hour" is examined.

In making a comparison of the six departmental "cost per pupil hour" figures, two departments, music and physical education, show the lowest amounts in schools having an enrollment below 300. Physical education also has the largest number of student hours in all schools except those below 100, while commercial enrollments ranked very high in all schools. As stated in previous paragraphs, the greater the number of pupil units, the lower the unit

cost of operation and maintenance. In all classes of schools, industrial arts shows the highest "cost per pupil hour", except for schools ranging from 100-199, where art was the largest. That industrial arts "cost per pupil hour" is high could have been anticipated since the initial cost of installing such a department is high due to costly machinery. That art should maintain such a high "cost per pupil hour" is surprising studying the number of student hours involved. In all cases, these hours were very much lower than for any of the other departments. This naturally would drive up unit cost.

With the exception of industrial arts, commercial, home economics and art, the "cost per pupil hour" was no higher than 28.5 cents per pupil hour. Art presented the lowest cost per pupil hour of all departments with a cost of .142 cents. This occurred in schools over 300 enrollment.

To enable a more rapid comparison of "cost per pupil hour", Table XXII has been compiled and is presented on page 45.

TABLE XXII

COST PER STUDENT HOUR BASED ON SIZE OF SCHOOL

Department	0-99	100-199	200-299	Over 300
Industrial Arts	$.727	$.372	$.257	$.261
Art		.399	.162	.142
Commercial	.303	.278	.192	.160
Home Economics	.378	.285	.252	.227
Music	.210	.258	.206	.227
Physical Education	.228	.191	.137	.207

To facilitate further comparison of cost per student hour, it was thought that the total enrollments of all 156 responding schools might be helpful. A brief table (XXIII) on page 46 furnishes this information. It will be noted that the largest schools have an enrollment approximately 13 times that of the smallest schools and about three times that of the intermediate enrollment classifications.

TABLE XXIII

TOTAL ENROLLMENT OF 156 SCHOOLS
ACCORDING TO SIZE

0-99	100-199	200-299	300 and over	Total Enrollment 666
2,119	7,726	7,496	26,570.	43,911

Summary of the Chapter

By study of the figures and results given in this chapter, several conclusions may be drawn and perhaps as many hypotheses set up. But the specific objectives of the survey were concerned with total amount of money spent in each department, salaries paid, and cost per pupil hour, determined for four enrollment ranges.

Low enrollments definitely penalize the small school financially since state accrediting regulations necessitate certain minimum standards. This base rests equally heavy on both large and small schools. Since the cost per pupil hour decreases with increased enrollment, the smaller the school, the heavier the financial burden in reference to special departments.

Physical education dominates the six departments surveyed in number of teachers required and in total sala-

ries paid where the enrollment is over 300, while industrial arts generally commanded high salaries in schools except those of the smallest enrollments. Salaries of art teachers were definitely lower than any of the other five departments and there were relatively few art instructors. Salaries increased with increased enrollment of the schools.

Industrial arts presented generally the highest cost per pupil hour, while music lagged not far behind. In the main, the "cost per pupil hour" in all departments tended to be below 28.5 cents.

In schools (0-99 enrollment), the cost per student hour ranged from $.210 for music, $.228 for physical education, $.303 for commercial, $.378 for home economics, and $.727 for industrial arts.

In schools (100-199 enrollment) the cost per student hour varied from $.191 for physical education, $.258 for music, $.278 for commercial, $.285 for home economics, $.372 for industrial arts, and $.399 for art.

In schools (200-299 enrollment) the cost per student hour ranged from $.137 for physical education, $.162 for art, $.192 for commercial, $.206 for music, $.252 for home economics, and $.257 for industrial arts.

In schools over three hundred enrollment, the cost per student hour varied from $.142 for art, $.160

for commercial, $.207 for physical education, $.227 for both music and home economics, and $.261 for industrial arts.

For all schools, the minimum and maximum costs per student hour were represented by $.142 for art and $.727 for industrial arts.

CHAPTER III

Relation of Teacher Load in Special Departments

"The study of teacher load apparently has been much neglected since the thirties."[16] There have been several sporadic studies, but no overall investigations. Reliable information can be considered quite incomplete. Very little work has been done in "teaching load" in reference to the special departments analyzed in this thesis.

T.E. Dawes declares, "Teaching loads should be equalized because of the wide variation which the differences in loads can cause in actual salaries paid per load hour, in the instuction cost per load hour, and in teaching services given to the children. Loads might be more equalized if administrators and teachers, working both individually, and through professional organizations, make the general public aware of the importance of teaching loads."[17]

There are many aspects to be considered in the

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16 W.S. Munroe, Encyclopedia of Educational Research, Revised Edition, The MacMillan Company, New York, 1950, p. 1460.

17 T.E. Dawes, op. cit., p. 33-34.

problem of teaching loads. Some teachers, for instance, work more efficiently than do others; some are more thorough in their preparation; some will do a good job and some a bad one. Yet these possibilities are always present and remain regardless of the basis of measurement. This survey cannot answer all of these imponderables. However, it must measure certain qualities in order that it may have value as a research problem. So by means of charts and graphs an attempt will be made to analyze the teaching load in terms of number of hours per week taught by the instructor both in his special department and in other subject fields. In the general movement toward standardization of the high school it is to be expected that accrediting agencies will not have overlooked the necessity for some definition of the teacher's load. A statement of the pertinent standard in the North Central Association of Secondary Schools and Colleges is as follows: "Standard 8-----An average enrollment in the school in excess of thirty pupils per teacher shall be considered as a violation of this standard."[18]

Clarifying this standard is the following recom-

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18 "Policies, Regulations, Standards, and Recommendations for Accrediting Secondary Schools", North Central Association Quarterly, X, July, 1935, p. 99.

mendation: The association fixes, (1) pupil teacher ratio, 25 - 1; (2) the number of classes taught by the teacher, 5 daily; and (3) the total number of pupil-periods per day, 150 per teacher.

A great deal of discussion occurs in educational circles concerning the effect on the quality of teaching that results when the quantity becomes overburdensome. This problem has been well presented in the following paragraphs.

"What constitutes an appropriate load for the teacher is not a new question, but the rising tide of secondary education with an attendant broadening of the curriculum and general extension of school service, has brought such rapidly mounting school costs as to focus an increased measure of attention on this problem. The recent financial distresses of the schools sharpened the demand that costs be held down or reduced, despite mounting enrollments. The taxpayer watches the educational expenditure, often applying a dollar-and-cent gauge.

Of another view is the teacher, who is most favorably situated for observing the educational product. When a greater quantity of work is demanded, he insists that it can only be accomplished at the expense of the quality of the product; that if the number of pupils put through the

mill is increased, the educational change in each will be changed. In this contention the teacher is backed by college authorities who are more concerned with quality rather than with quantity in the high-school output."[19]

In analyzing the teacher load in special departments, it was necessary to set up several tables for purposes of making comparison and isolating noteworthy facts. Information presented in four tables consists of the following items; (1) the number of teachers for each department, (2) total hours taught in the special department, (3) average number of hours taught in the special department, (4) number of hours taught in other subjects, (5) average number of hours taught in other subjects, (6) total load in hours, and (7) the number of teachers with extracurricular activities. Table XXIV includes schools with an enrollment of below 100; Table XXV, those with 100-199; Table XXVI, those with 200-299; and Table XXVII with 300 and over. These four tables are presented on the following four pages.

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19 Koos, Hughes, Hurtson, and Reavis, Administering the Secondary School, American Book Company, New York, Chapter X, p. 379.

TABLE XXIV

TEACHING LOAD PER WEEK
PER TEACHER IN THE SPECIAL DEPARTMENTS
Enrollment 0-99

Special Departments	Number of Teachers	Total Hours Taught in Special Departments	Average Number of Hours Taught In Special Departments	Number of Hours Taught in Other Subjects	Average Number of Hours in Other Subjects	Average Total Load of Hours	Number of Teachers With Extra Curricular
Industrial Arts	2	25	12.5	25	12.5	25	2
Art							
Commercial	24	487	20.29	81	3.33	23.62	20
Home Economics	5	85	17.0	39	7.79	24.79	5
Music	10	152	15.2	123	12.3	27.3	10
Physical Education	54	252	4.66	1018	18.66	23.32	54

TABLE XXV

TEACHING LOAD PER WEEK
PER TEACHER IN THE SPECIAL DEPARTMENTS
Enrollment 100-199

Special Departments	Number of Teachers	Total Hours Taught in Special Departments	Average Number of Hours Taught in Special Departments	Number of Hours Taught in Other Subjects	Average Number of Hours in Other Subjects	Average Total Load of Hours	Number of Teachers With Extra Curricular
Industrial Arts	27	540	20.0	125	4.63	24.63	18
Art	4	32	8.0	63	16.0	24.0	3
Commercial	53	1194	22.52	161	3.03	25.55	39
Home Economics	40	781	19.52	179	4.47	23.99	35
Music	30	642	21.4	225	7.5	28.9	16
Physical Education	109	660	6.05	1899	17.42	23.47	101

TABLE XXVI

TEACHING LOAD PER WEEK
PER TEACHER IN THE SPECIAL DEPARTMENTS
Enrollment 200-299

Special Departments	Number of Teachers	Total Hours Taught in Special Departments	Average Number of Hours Taught in Special Departments	Number of Hours Taught In Other Subjects	Average Number of Hours in Other Subjects	Average Total Load of Hours	Number of Teachers With Extra Curricular
Industrial Arts	29	693	23.89	90	3.1	26.99	20
Art	3	30	10.0	51	17.0	27.0	2
Commercial	36	920	25.55	57	1.58	27.13	30
Home Economics	31	746	24.03	40	1.29	25.32	26
Music	32	665	20.78	234	7.3	28.08	17
Physical Education	67	558	8.33	987	14.73	23.06	61

TABLE XXVII

TEACHING LOAD PER WEEK
PER TEACHER IN THE SPECIAL DEPARTMENTS
Enrollment 300 and over

Special Departments	Number of Teachers	Total Hours Taught in Special Departments	Average Number of Hours Taught in Special Departments	Number of Hours Taught in Other Subjects	Average Number of Hours in Other Subjects	Average Total Load of Hours	Number of Teachers With Extra Curricular
Industrial Arts	72	1394	19.36	127	1.76	21.12	52
Art	26	552	21.23	78	3.0	24.23	17
Commercial	76	1795	23.61	110	1.44	25.05	48
Home Economics	66	1551	23.5	70	1.06	24.56	44
Music	78	1881	24.11	105	1.34	25.45	55
Physical Education	107	1958	18.3	446	4.16	22.46	92

The information contained in the tables clearly substantiate two previous studies concerning "teaching load".

First, the average total load of hours per week, in all cases, remains very close to 25. This is in accordance with the national average of 25 recently (1951) determined by the Research Bulletin of the National Education Association.[20]

Secondly, the number of hours taught in other subjects outside of the special departmental hours varies inversely with the size of the school. The figures in the four tables above prove this beyond a doubt. This corroborates a study presented by Edward F. Potthoff in "School Review". His research, based on 3490 teachers in the 525 public four year high schools in the state of Illinois, shows that relatively few of the teachers in this study give instruction in one subject only, and appreciable percentage teach from 5 to 8 subjects. He declares, "It is obvious that the number of different subjects in the teaching load varies inversely with the size of the school. The smaller the number of teachers, the less can their tasks be

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20 National Educational Association, "Teaching Load", Research Bulletin, Vol. 29, No. 1, February 1951.

specialized."[21]

These two salient factors alone would seem to give considerable validity to the figures compiled for this survey.

It is worth noting that teachers of physical education taught less average time in their special department than did those in the other departments. This was true, regardless of the size of the school, although the average increased directly with the enrollment of the school. This may be so because a large number of coaches teach physical education. Harold Sullivan found that "physical education ranked first in subjects taught by coaches".[22] In smaller schools, teaching the minimum amount of physical education, coaches naturally would be compelled to teach in other subject fields to complete their teaching load.

Numerically, there were more physical education instructors teaching in their departments than all other departments. In fact, this superiority in numbers was quite distinct. This undoubtedly is the case because physical education is mandatory in all schools while the other special subjects are elective.

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21 Edward F. Potthoff, "Teaching Combinations: Reductio Ad Absurdum", School Review, XLIII, June 1935, p. 386.

22 Harold Sullivan, "Trends and Practices in Subjects Coaches Teach and Sports Coached Within the Last Ten Years in the State of Minnesota", Unpublished Master's Thesis, University of North Dakota, 1951, p. 37.

In schools below two hundred the commercial teacher taught the least number of hours outside of the department, while in schools above that enrollment, home economics teachers taught least outside their department.

In small schools, enrollment below 100, all teachers had some extracurricular activities and in all schools, at least 85 percent of the teachers had some activity to supervise. Generally, the music teachers were least troubled with extracurricular work, while a high percentage of physical education instructors participated in activities beyond the classroom. This undoubtedly reflects the predominance of athletic coaches among physical education teachers.

Music teachers in all schools, regardless of size, carried the heaviest total teaching load in hours per week. There may be several explanations for this. On can surmise that the band would constitute one class period and if this were so, the large number constituting such an organization would certainly bring the total teaching load to a high figure when determined in pupil hours per week. It is true that music instructors also work with small groups, but apparently the size of the band and choral groups tend to cancel out the smaller groups. This tendency toward a larger load was more noticeable among music teachers in schools below three hundred.

Art teachers in schools below three hundred taught very little in their own department, teaching twice as much outside of their field as they did in their field. This would seem to contradict a study made by S.A. Romine[23] who in a study of 2128 teachers and their teaching combinations in the state of Colorado found that 90 percent of the art majors were teaching in their major field. His study does support this survey concerning physical education. There he found that only 58 percent of the teachers were teaching in their chosen field. His figures for the other four special fields are as follows: Commercial, 60 percent; home economics, 54 percent; industrial arts, 82 percent; and music, 77 percent. Romine's survey would also be inconsistent with this study in the field of home economics. In this thesis, home economics teachers appear to do relatively little teaching outside of their major field.

It was felt advisable to include a table showing the enrollment in departments according to the size of the school, and showing also the enrollment per semester. Table XXVIII, which contains this information, follows on the next page.

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23 S.A. Romine, "Subject Combinations and Teaching Loads in Secondary Schools", School Review, Vol. 57:551-58, December, 1949.

TABLE XXVIII

ENROLLMENT IN DEPARTMENTS ACCORDING TO SIZE OF SCHOOL

Department	Size of School							
	0-99		100-199		200-299		300 and over	
	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.
Industrial Arts	52	50	1759	1766	1905	1932	7,452	7,515
Art			120	120	639	641	4,327	4,539
Commercial	1270	1260	3277	3230	2633	2598	8,244	8,193
Home Economics	210	209	2259	2296	1969	2072	6,004	6,003
Music	546	559	3183	3025	3981	3962	13,616	13,598
Physical Education	1777	1775	5245	5267	5058	5061	17,151	17,093

It was thought that in the largest schools where mid-term promotion is practiced extensively that the teacher load might be affected by an increase or decrease in enrollment, but on reviewing Table XXVIII, the change from one semester to the next is so slight as to be negligable. Apparently mid-term fluctuations may be disregarded as far as "teaching load" complications are concerned.

In examining the departmental enrollments for industrial arts and home economics in Table XXVIII, and then referring to Table XXIV as to number of teachers necessary in these departments, a question arises as to the advisability of teaching these subjects in the small school curriculum. Both of these departments require a fairly heavy outlay of costly equipment to satisfy state accrediting standards. Perhaps other courses would be more practical in schools of small enrollments.

Table XXVIII indicates that music evidently is a popular subject, particularly in the larger schools, while commercial courses in all schools, regardless of size has a definite appeal for the student of today.

The number of times a class meets per week has a definite bearing on "teaching load". A class which meets only once a week would clearly require less preparation than a class which has five sessions per week. To make

an analysis of this situation required the formation of another table. This table lists the number of times each departmental class meets per week. The responses were listed for each of the four enrollment classifications: 0-99; 100-199; 200-299; and over 300. This Table XXIX is presented on the following page.

TABLE XXIX

DAYS PER WEEK CLASS MEETS

Department	Size of School																				
	0-99					100-199					200-299					300 and Over				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Industrial Arts					2		1			26					23			1		39
Art							1	1	1	1		1	1		3	1				26
Commercial					24					48					28			1		38
Home Economics					5					39					27		2			37
Music		3	5		4		5	4		28		4	3		18		2	7	1	30
Physical Education	12		9		6	17		7	12	17		7	6	5	7		7	10		23

On examination of Table XXIX, one notes only two of the departments, commercial and home economics, meet regularly five times a week in all schools. With but two exceptions, industrial arts classes also meet five times weekly. Art classes show the widest variation, from meeting from one to five times per week. Just why there should be such a variation is difficult to explain. It is the most recent of the special departments in the high school curriculum which may account for this tendency.

In music and physical education the class meetings are spread out in a fairly regular pattern of twice, three and five times weekly. Most musical groups outside of band do not meet each day because of the necessity of meshing many small vocal and instrumental groups during an assigned time period. Physical education in Minnesota is administered under three different programs, A, B, and C, which fulfill varying requirement standards. The minimum requirement demands two classes of physical education each week. Table XXIX shows that this program predominates in schools below 300 enrollment, while the larger schools complete the maximum requirement of five classes per week. In schools with enrollments ranging from 100 to 300, a preference for the three or four classes per week seems to exist. Lack of space, perhaps, is the reason for this arrangement as much as anything.

In respect to "teaching load" for the various departments, it would appear that the teacher who has to prepare regular assignments five times a week would be more heavily burdened although there is some question as to the accuracy of this line of reasoning. The teacher of music who has a large number of different groups may have a greater burden due to the greater variety of the preparation. This study cannot answer all these imponderables due to its limited scope.

In computing "teaching load", the academic load cannot be the sole criteria for determination. Extracurricular work also must be considered. This chapter has been devoted to the academic load, while the extracurricular phase shall be considered in the following chapter.

Summary of Chapter

The average total load determined in this study is very much in accordance with the national average as determined by figures from the National Education Association.

The number of hours teachers instruct outside of their own speciality varies inversely with the size of school. In other words, the less teachers in a system, the more general becomes their teaching load.

Physical education teachers spend more time teaching outside their field than do instructors in other departments. Commercial and home economics teachers spend most teaching time within their department.

In small schools, all teachers assume charge of some extracurricular work, while in larger schools the percentage is approximately 85 percent.

Art teachers tend to teach very little in their own departments.

There is some question as to the economic practicability of teaching home economics and industrial arts in the very small school.

Music appears to be the most popular elective, no matter what the size of the school, although commercial subjects exerted a strong appeal.

Art classes show a great variation in the number of times the class meets per week. This variation exists in physical education and music but the causes are more easily ascertainable.

CHAPTER IV

Teacher Load in Extracurricular Activities

It is self-evident that teacher load cannot be divorced from time consumption and extracurricular activities do require time in varying degrees. "Time is the essence of life and therefore, of work; in the modern world more people are paid on a time basis than any other. Laborers, un-skilled and semi-skilled, craftsmen and trades all reckon the value of their work in terms of time. Even the professions, while employing fee schedules based on difficulty of performance, rely to a very great extent upon the time factor in evaluating their work. Upon what basis are teachers paid? Is there recognition of teacher load in terms of time required to perform the services asked of teachers? Is there recognition of preparation and training for the job? Is there recognition of the educational level at which a teacher performs, and if so, is this a valid policy? These questions lurk in the fringe of teacher load surveys."[24]

A survey of the city schools of San Diego, Calif-

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24 Oswald Tufte, "A Survey of the Time Load of Teachers in Accredited Schools of Eastern North Dakota", Unpublished Master's Thesis, University of North Dakota, August, 1950, p. 9.

ornia[25] found that while curricular assignments are usually equal, there are great inequalities in time load allotted to extracurricular activities.

While this study cannot concern itself with all the pros and cons which currently rage in connection with extra-curricular work, it can present a picture of the amount of hours that teachers in the special departments average per week outside of the classroom.

P.W. Terry states, "The heavier loads tend to be borne by teachers of physical education, music, English, science, and social studies".[26] This study shows that physical education, industrial arts, and music in that order, bear the larger extracurricular loads (Tables XXXI, XXXII, XXXIII, and XXXIV). Heavy athletic coaching duties tend to give larger activity burdens to physical education and industrial arts teachers surveyed.

Since there was such a large variation in pay scales for extracurricular work and a lack of response on the part of some schools as to extra compensation, it was

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25 Ralph C. Dailard and Robert E. Jenkins, "Our Children Won!", The American School Board Journal, August, 1948, Vol. 117:23-24.

26 P.W. Terry, Extracurricular Activities in the Junior High School, Warwich and York, New York, 1926, p. 126.

impossible to make an extensive study of pay for extra work. However, C.L. Bowlby,[27] principal of the Dalton, Massachusetts High School declares that there is a growing revolt by teachers, against overtime work that is not reflected in their pay envelopes. This may tend to lower local standards of teaching. Mr. Bowlby might also have pointed out that many teachers who are not paid "extra" for extracurricular work need to make "extra" money by working outside of school, and that this, also tends to lower teaching efficiency.

Not all schools reported extra pay for extracurricular activities. Only 48 of the 156 schools submitting reports gave indication that they paid extra for such duties. This information is given in Table XXX on page 71.

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27 C.L. Bowlby, "A Little Extra for Those Extracurricular Duties", Clearing House, September, Volume 22:20, 1947.

TABLE XXX

PERCENT OF SCHOOLS REPORTING
EXTRA PAY FOR EXTRACURRICULAR WORK

Size of School	Percent for All Activities	Percent for Coaches Only	Percent for Coaches and Music Only
0-99*	08.3		06.3
100-199*	12.5		02.1
200-299	20.7	06.3	
300 and Over	31.2	06.3	06.3
Total	72.7	12.6	14.7

* One school reported extra pay for class play.

It will be noted that as the school enrollment increases, the number of schools paying extra for work outside the classroom increases. For those paying extra, the tendency seems to be to pay for all extracurricular activities and not only for athletic coaching and music. In general, a large number of schools pay the athletic coach and music instructors larger salaries which indirectly is extra pay for extra work. On page eleven of this study, a schedule of compensation for each extracurricular activity is presented. This schedule was adopted by the Minneapolis schools in 1948. Several of the respondents included

schedules of extracurricular compensation with their questionnaire. It was felt that a sample of such a schedule from a smaller school might be included in this study. A sample of the compensations for the various special activities of the Springfield, Minnesota school is listed below:

$150 head coach football or basketball
100 for director of speech
100 for adult classes
75 for assistant coach football or basketball
75 for track coach
75 for baseball coach
50 for advisor to annual
50 for advisor to school paper

Tables XXXI, XXXII, XXXIII, and XXXIV, beginning on page 73, show the number of hours a week a teacher spends in doing work outside of the classroom.

TABLE XXXI

AVERAGE HOURS OF EXTRACURRICULAR ACTIVITIES
IN SPECIAL DEPARTMENTS
Enrollment 0-99

Department	Number of Teachers	Total Hours for All Teachers Per Week	Mean Hours Per Week Per Teacher
Industrial Arts	1	6	6
Art			
Commercial	17	63	3.7
Home Economics	2	10	5
Music	1	6	6
Physical Education	19	145.5	7.6

TABLE XXXII

AVERAGE HOURS OF EXTRACURRICULAR ACTIVITIES
IN SPECIAL DEPARTMENTS
Enrollment 100-199

Department	Number of Teachers	Total Hours for All Teachers Per Week	Mean Hours Per Week Per Teacher
Industrial Arts	11	93	8.4
Art			
Commercial	17	61.5	3.6
Home Economics	15	53.5	3.5
Music	6	26.5	4.4
Physical Education	33	247	7.4

TABLE XXXIII

AVERAGE HOURS OF EXTRACURRICULAR ACTIVITIES
IN SPECIAL DEPARTMENTS
Enrollment 200-299

Department	Number of Teachers	Total Hours for All Teachers Per Week	Mean Hours Per Week Per Teacher
Industrial Arts	17	109	6.3
Art	1	3	3.0
Commercial	24	80	3.3
Home Economics	16	42.5	2.6
Music	10	57.5	5.7
Physical Education	31	254.5	8.2

TABLE XXXIV

AVERAGE HOURS OF EXTRACURRICULAR ACTIVITIES
IN SPECIAL DEPARTMENTS
Enrollment 300 and Over

Department	Number of Teachers	Total Hours for All Teachers Per Week	Mean Hours Per Week Per Teacher
Industrial Arts	45	209.5	4.6
Art	14	35.5	2.5
Commercial	35	91.5	2.6
Home Economics	34	101.5	2.9
Music	35	159.5	3.1
Physical Education	33	247.0	7.4

"A close relationship seems to exist between physical education and coaching."[28] This evidently creates the large extra curricular load for physical education instructors. Coaching athletics demands a larger outlay of time than do most activities outside the classroom. The music teacher falls heir to a large number of associated outside activities which tends to bring up the weekly load.

While art, commercial and home economics teachers do not have as many hours per week of extra activities as the other three special departmental instructors, nevertheless, all average at least 2.5 hours per week.

The teachers in larger schools, generally speaking, spend fewer hours on the average per week than do those of the smaller schools which, in view of the larger faculties, would appear reasonable. What does seem surprising is the fact that the teachers in the very smallest schools do not average more hours per week in extracurricular work than the figures indicate. It would seem that in view of the limited faculty, the extracurricular load would be higher since the schools participate in most of the out-of-school activities conducted by the larger schools. However, this

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28 Harold Sullivan, "Trends and Practices in Subjects Coaches Teach and Sports Coached Within the Last Ten Years in the State of Minnesota", Unpublished Master's Thesis, University of North Dakota, 1951, p. 69.

is merely supposition and the figures presented in the previous charts do not bear this out.

Since the questionnaire requested that each school list all the extracurricular activities participated in by the teachers in the six special departments, a table listing the frequency of these activities was prepared. The frequency with which they occurred was listed for each enrollment range. Twenty-three different types of extracurricular activities were conducted by the teachers of the special departments (Table XXXV, page 77).

TABLE XXXV

TYPE AND FREQUENCY OF EXTRACURRICULAR ACTIVITIES CONDUCTED IN SCHOOLS

Activity	Size of School 0-99	100-199	200-299	300 and Over
Athletics				
Basketball	25	41	23	23
Football	22	39	26	22
Baseball	7	5	4	4
Hockey				4
Track	8	10	11	8
Assistant Coach	1	8	11	22
Journalism				
Paper	12	24	17	6
Annual	11	12	8	15
Hot Lunch	2	7	7	13
Music				
Chorus	5	8	7	4
Glee Club	1	5	4	3
Band	5	9	9	
Mixed Chorus	1	2	8	5
Prom		4	12	11
School Patrol				7
Dramatics				
Plays	3	10	3	3
Speech	1	1		2
Coach	3	4	1	3
Clubs	5	7	10	27
GAA	12	7	11	22
FHA		7	6	10
Advisors	6	11	12	22
Miscellaneous	5	11	9	36
Athletic Director		1	1	6

Generally, extracurricular activities present a varied and complex picture for the very smallest and the very largest schools. This is one phase of education where all schools find a common level. So for better or worse, the cocurricular, the extracurricular, the special activities, (call it what you will) picture is broad and extensive. It presents a burden of extra work on the teacher and must be considered a part of the whole teaching load. If it is to be work done beyond the regular load, it would appear that some adjustment should be made. This remains a problem for considerable research and will have to be settled in the not too distant future since the extracurricular program is growing rapidly.

Summary of the Chapter

Morrison's statement that "Service and not salary is the measure of success among professional men and women"[29] cannot be denied; nevertheless, the efficiency of an overloaded teaching staff may be jeapordized to such an extent that there can be no "measure of success".

A trend, that teachers should receive extra pay for out-of-class activities, seems to be developing. Out

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29 R.H. Morrison, "Teaching is a Profession", National Education Journal, March 1950, Vol. 39:202-203.

of the 156 responding schools, 48 indicated that some arrangement has been made to pay for extracurricular work and 35 of the schools allotted pay for all types of extra-curricular activity. There is considerable debate as to the merits of this tendency, but the trend is apparent from the figures quoted above.

The average hours per week that teachers of the special departments devoted to outside activities ranged from 2.5 to 8.4 hours. This differs somewhat from a study by E.W. Anderson in 1929 who concluded that "The amount of time spent by teachers in such work varies greatly, but the average ranges from 1 to 4.4 hours per week, with the range from individuals running from 0 to 13 hours."[30]

Physical education, industrial arts, and music teachers, in that order, carry the greatest extracurricular load per week. Every teacher, however, devoted at least 2.5 hours per week to work outside the regular curriculum. The teachers in schools, having an enrollment over 300, averaged less hours per week in extracurricular work than those in smaller schools. No matter what the size of the school, physical education teachers averaged much the same time in outside activities.

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30 E.W. Anderson, "Extracurricular Duties", Educational Research Bulletin, Vol. 8:315-17, 1929.

All schools, both large and small, conduct a large and varied program of extracurricular activities. Most schools participated in the greater portion of the twenty-three different types of extracurricular activities.

CHAPTER V

Summary and Conclusions

To draw conclusions from this survey, or any survey, is a matter which must be approached with caution. The 156 schools surveyed may or may not reflect situations which are the same as that of another group of 156 schools of comparable size. There are many factors which would tend to cause deviation such as the location of the schools, different state and local standards, and philosophies of the schools involved. The survey should have value as far as it concerns costs per pupil hour in the special departments surveyed, especially for administrators in Minnesota public schools. A search of literature indicated there had been little research in regard to costs involved in special departments, at least in the past decade. Since special departments have developed rapidly in the past thirty years, a national survey might be valuable.

All conclusions made will relate definitely to the purposes presented in Chapter I.

1. To determine the amount of money spent in special departments in the schools of Minnesota for equipment and supplies, exclusive of salaries.

The overall picture would seem to indicate that

the smallest schools labor under a much heavier financial burden than do the larger schools in supporting their special departments. It would be recommended that further study be made of ways in which to alleviate this situation. It might be done by departmental state aids graduated to the enrollment of the school. This is merely a suggestion, but it would appear from this study that something must be done in this direction.

2. To determine the relative salaries of teachers in these special departments.

There were more physical education instructors than there were teachers in any of the other departments. This was true for all enrollment classifications. Industial arts instructors generally commanded the highest salaries except those teaching in the smallest schools. Art teachers were paid the least and there were relatively few of them in comparison with the other five departments. Salaries definitely increased with increased enrollment of the schools.

3. To determine the teacher load in these special departments.

The average teacher load determined by this study was slightly below 25 hours per week. This compared favorably with the national average determined by the National

Education Association recently.[31]

The number of hours teachers instruct outside of their own speciatity varied inversely with the size of the school. That is, the less teachers in a system, the more general becomes their teaching load.

Physical education teachers spend more time instructing outside their field than do instructors in other departments. Commercial and home economics teachers spend most time within their department, while art teachers tend to teach very little in their own department.

The teaching load, including curricular and extra-curricular, averages below 35 hours a week. This figure, of course, represents only actual working time with students and does not include time spent in lesson planning, preparing examinations, correcting papers, and related work. This time phase was not part of this study. It has been studied intensively in other studies, however.

4. To determine the cost per student hour in these departments.

Since the cost per pupil hour decreases with increased enrollment (page 45), the survey indicates that the small schools, particularly those having an enrollment of below

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31 National Education Association, "Teaching Load", Research Bulletin, Vol. 29, No. 1, February, 1951.

100, carry a relatively heavier financial burden in order that they might include the six special departments in their curriculum. Perhaps state aids should be revised with this in mind.

The highest costs per student hour occurred in the department of industrial arts with music being second in this respect. Generally, the "cost per pupil hour" in all departments was below 28.5 cents.

The ranges of the special departmental costs per pupil hour should be of special interest to administrators so they are listed in ascending order for each of the four enrollment classifications. These follow below:

0-99 Enrollment

$.210 for music
.228 for physical education
.303 for commercial
.378 for home economics
.727 for industrial arts

100-199 Enrollment

$.191 for physical education
.258 for music
.278 for commercial
.285 for home economics
.372 for industrial arts
.399 for art

200-299 Enrollment

$.137 for physical education
.162 for art
.192 for commercial
.206 for music
.252 for home economics
.257 for industrial arts

Over 300 Enrollment

$.142 for art
.160 for commercial
.207 for physical education
.227 for music
.227 for home economics
.261 for industrial arts

The costs per pupil hour in all the special departments, while by no means are insignificant figures, are not disproportionate when viewed against the costs of other public services. However, there is room for improvement. This may be brought about by consolidation of the smaller units, more intensive use of existing equipment, and improved techniques of instruction.

5. To determine the teacher load in extracurricular activities.

The average hours per week that teachers of the special departments devoted to outside activities ranged from 2.5 to 8.4 hours. Physical education, industrial arts, and music teachers, in that order, carry the greatest extracurricular load per week. Every teacher devoted at least 2.5 hours per week to work outside the regular curriculum. The teachers in schools having an enrollment over 300, averaged less hours per week in extracurricular work than those in smaller schools.

In small schools, all teachers assume charge of some

extracurricular activity, while in the larger schools, the percentage is approximately 85 percent.

No matter what the size of the school, physical education teachers averaged much the same time in outside activities.

Most schools participated in the greater portion of the twenty-three different types of extracurricular activities listed by the respondents.

A trend, that teachers should receive extra pay for out-of-class activities, seems to be developing. Out of the 156 responding schools, 48 indicated that some arrangement has been made to pay for extracurricular work, and 35 of the schools allotted pay for all types of extracurricular activity. There is considerable debate as to the merits of the tendency, but the trend is apparent from the figures quoted above.

In conclusion, the survey would seem to have been profitable. While not completely solving any problem, it has uncovered some interesting facts and definitely indicated the need for further study on a broader scope.

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APPENDIX I

DATA FOR SCHOOL YEAR 1950-51

	1st Semester Enrollment	2nd Semester Enrollment	No. of Days Per Week	No. of Instructors	Total Salary Paid	Total Money Spent	Percent Regular School Funds	Percent Federal Funds	Percent Other Funds	List
EXAMPLE	150	148	3	2	$2700	$6000	80	15	5	Demonstration
Industrial Arts										
Art										
Commercial										
Home Economics										
Music										
Health, Physical Education, and Recreation										

TEACHING LOAD PER WEEK

INDUSTRIAL ARTS

	Industrial Arts Hours	Extracurricular Activity	Activities Hours	Other Subjects Subject	Hours
T_1					
T_2					
T_3					

APPENDIX I (Continued)

ART

	Art Hours	Extracurricular Activity	Activities Hours	Other Subject	Subjects Hours
T_1					
T_2					
T_3					

COMMERCIAL

	Commercial Hours	Extracurricular Activity	Activities Hours	Other Subject	Subjects Hours
T_1					
T_2					
T_3					

HOME ECONOMICS

	Home Economics Hours	Extracurricular Activity	Activities Hours	Other Subject	Subjects Hours
T_1					
T_2					
T_3					

MUSIC

	Music Hours	Extracurricular Activity	Activities Hours	Other Subject	Subjects Hours
T_1					
T_2					
T_3					

APPENDIX I (Continued)

HEALTH, PHYSICAL EDUCATION AND RECREATION

Health, Physical Education, and Recreation		Extracurricular Activities		Other Subjects	
	Hours	Activity	Hours	Subject	Hours
T_1					
T_2					
T_3					

Are teachers paid an additional amount of money for extra-curricular activities? YES_____ NO_____.

If so, please send along a copy of the schedule for this extra pay.

Do you wish a return of the results of this survey?

YES_____ NO_____.

APPENDIX II

LIST OF TOWNS REPORTING

Alden
Alexandria
Amboy
Annandale
Appleton
Argyle
Arlington
Ashby
Atwater
Audubon
Backus
Badger
Bagley
Balaton
Barnesville
Barnum
Barrett
Battle Lake
Bayport
Beardsley
Beaver Creek
Bemidji
Bertha
Big Lake
Biwabik
Blooming Prarie
Borup
Branden
Brewster
Bricelyn
Brooten
Brownton
Buffalo
Buhl
Byron
Campbell
Canby
Canton
Carlton
Chaska
Chisago City
Clara City
Climax
Cokato

APPENDIX II (Continued)

LIST OF TOWNS REPORTING

Comfrey
Cromwell
Crosby-Ironton
Cyrus
Deer River
Dover
East Grand Forks
Eden Valley
Edgerton
Elbow Lake
Elkton
Ely
Erskine
Evansville
Eyota
Fairfax
Fairmont
Felton
Finlayson
Frost
Fulda
Gaylord
Glenwood
Glyndon
Goodridge
Granada
Grand Meadow
Grand Rapids
Granite Falls
Greenbush
Halstad
Harmony
Hawley
Hector
Hendrum
Henning
Heron Lake
Hills
Hinkley
Hitterdal
International Falls
Ivanhoe
Karlstad
Kasson

APPENDIX II (Continued)

LIST OF TOWNS REPORTING

Kerkhoven
Lake Benton
Lake Crystal
Lakefield
Lake Park
Lakeville
Lake Wilson
Lancaster
LaPorte
Lester Prairie
Litchfield
Little Falls
Luverne
Mabel
Madison
Mahtomedi
Menahga
Maple Lake
Mapleton
Marietta
Middle River
Milaca
Milan
Milroy
Minnesota Lake
Moorhead
Morton
Mound
Mountain Lake
Newfolden
New Prague
New Ulm
Northfield
Odessa
Oslo
Paynesville
Pemberton
Peterson
Pine City
Pine Island
Pine River
Plummer
Preston
Red Wing

APPENDIX II (Continued)

LIST OF TOWNS REPORTING

Redwood Falls
Renville
Rothsay
Rush City
Rushford
Sauk Rapids
Sleepy Eye
Springfield
Starbuck
St. Charles
St. Cloud
Stephen
St. Louis Park
St. Peter
Strandquist
Swanville
Thief River
Tracy
Ulen
Verndale
Waterville
Willmar
Winthrop
Zumbrota

APPENDIX III

East Grand Forks, Minnesota

Dear Superintendent:

Enclosed is a form pertaining to the special departments in your school. It is being sent to all schools in the state of Minnesota and seeks information about money spent in all departments and teaching load of instructors.

This study is being made under the direction of Leonard R. Marti, head of the department of Physical Education for men at the University of North Dakota.

For completing this form, the writer will be deeply grateful. A self-addressed stamped return envelope is enclosed.

A copy of the tabulated results will be sent to you, if you so indicate.

Thank you very kindly for your time and cooperation.

Sincerely yours,

Merlin Elie